

Minutes of the Third Meeting of the
Consortium on Biobased Industry
October 17, 2005

Meeting convened at 10:15 in Room 104, Lakeland College, 3591 Anderson Street,
Madison, WI

Present:

Tom Scharff
Earl Gustafson
John Imes
Bill Bruins
Craig Harmes
Eric Apfelbach
Scot Wall
Sue LeVan

Sandra Austin-Phillips, representing
Michael Sussman
Jim Allen
John Lawson
Jan Alf
Sue Beitlich
Joe Schefchek, representing
Kim Zuhlke
Bruce Bullamore

Excused:

John Malchine
Rob Sherman
Holly YoungBear Tibbets
Charles Hill

Agriculture Trends Briefing

Will Hughes, Administrator of the Division of Agricultural Development at the Department of Agriculture, Trade and Consumer Protection, made a presentation explaining trends facing the agriculture industry in Wisconsin. Will discussed the implications of the declining number of farms in Wisconsin and the slower decline in acres farmed. He also discussed the trends in dairy herd size and the changes occurring in the industry to as producers work to cope with fluctuating milk prices. This presentation has been posted to the www.bioeconomy.wi.gov website.

Forestry Trends Briefing

Terry Mace, Department of Natural Resources, followed with a presentation of the trends in the Forest Products and Paper industry. Large forest product companies no longer look at timber holdings as a “bank”, but rather look to maximize their return on investment. This has led them to sell off large parts of their timber holdings, making proper forest management more difficult. He also explained that Wisconsin has lost some pulp mills and consequently has difficulty managing state forests due to the lack of market for lower quality wood. The value added by operating the pulp mill as a biorefinery and creating an additional value stream may be enough to keep the mills competitive. Discussion among the Consortium focused on the similarities between the pressures faced by the agricultural and forest products industry. Sue LeVan noted that while they are under pressure, these industries are essentially healthy; they just need to find solutions to some key problems. Will Hughes noted that the pharmaceutical industry

offers the potential for major value-added production and Terry agreed, noting that the issue is under consideration within the forest products industry. This presentation has been posted to the www.bioeconomy.wi.gov website.

Biobased Fuels and Chemicals in the Midwest

Dr. James Frank, Director for Biotechnology and Biodefense Applications at Argonne National Laboratory spoke about the work of Argonne National Laboratory in the field of biomass development. He observed that much of the Midwest has missed the biomedical revolution, although it has managed to keep pace with the Ag biotech advancements. The challenge now is to get “ahead of the curve” in the area of industrial biotechnology. Much of the opportunity is driven by the world-wide interest in sustainability. At present, corn based ethanol is the industrial driver because it uses the existing infrastructure. In the long run, however, we will need to transition to cellulosic ethanol because it is a better energy and environmental product and the corn feedstock will be required for higher value products. One reason that small ethanol plants can be successful is due to their use of different forms of ownership and financing. Because they do not depend on the economies of scale as do petrochemical refineries, biorefineries can be smaller and thus growth can be better controlled and transportation costs reduced.

At present, about 5% of chemical sales are biobased. However, the chemical industry sees a major portion of their growth coming from biobased feedstocks. These feedstocks and new processes hold out the likelihood of greatly simplified, and therefore, less expensive manufacturing processes. They also promise a higher value use of corn. One question raised by this line of thinking concerns the availability of a chemical production infrastructure in Wisconsin or much of the Midwest.

Dr. Frank also highlighted the importance of the BIO 2006 conference in Chicago to the Wisconsin biobased industry. This is the largest world-wide meeting of industry leaders and decision makers and, for the first time when the conference is held in Chicago, it will have an industrial biotech track. This will raise the Midwest profile in this industry and Wisconsin cannot afford to miss the opportunity.

Dr. Frank also discussed the value of a Midwest Regional organization. The US Department of Energy and Department of Agriculture each have discrete priorities, but the Midwest states need to look at what makes sense from an industry point of view in the region. Together, they can influence the direction of national policy. This presentation will be posted to the www.bioeconomy.wi.gov website.

Goals and Values Discussion

Judy Ziewacz, Deputy Director, Department of Agriculture, Trade and Consumer Protection led off a discussion of the values and goals to be pursued by the Consortium. The discussion concluded that Wisconsin goals must be based on Wisconsin needs and not merely a subset of a national goal. There was some support for a bottom up calculation of the production potential for various bioproducts. Further discussion noted goals in a number of categories, not all of which were based solely on bioproducts

production. Among these alternatives were the value of local ownership and rural revitalization. Eric Apfelbach found broad support for the three-part taxonomy of 1.) working to strengthen the existing biobased sectors in Wisconsin, namely the Agriculture and Forestry businesses, 2.) Working to grow and fully develop new and emerging technologies such as ethanol production and anaerobic digesters and 3.) looking for new technologies that will allow Wisconsin to leapfrog the market and take a leadership position. Above all, he pointed out, Wisconsin should aim to lead, not follow. The discussion was based on the goals discussion starter paper previously posted at www.bioeconomy.wi.gov.

Working Group Updates

Very brief reports were made by Working Group leaders. Scot Wall indicated that the Economics Working Group will look at the energy-fuel footprint in Wisconsin and will also consider how the state can compete globally, perhaps through branding of state products. Jan Alf indicated one priority for the Education and Outreach Group be to engage the public in this effort. Earl Gustafson pointed out that much of the Environmental Group effort will depend on the recommendations that come before the Consortium. For the most part they will focus on identifying and removing barriers. Bruce Bullamore explained that a priority for the Organizations Working Group would be to engage local groups in providing input to the Consortium. John Imes indicated that much of the Environmental Working Group effort would revolve around the ability of the Green Tier program to enable progress in developing the biobased industry.

Next Meeting

Tom Scharff announced that Sue LeVan had offered to host the next meeting at the Forest Products Laboratory in Madison. That meeting will be held on December 12, 2005.

Other

Pat Meier then offered his analysis that the December meeting would be largely consumed by presentations and discussion of the final report by the Energy Center of Wisconsin on the Opportunities Study. This would not leave adequate time for Working Groups to provide in depth reports of their work, which is anticipated to require nearly another full meeting. The Consortium agreed that an additional meeting should be scheduled for January 23, 2006.

Conclusion

The meeting adjourned at approximately 4:00 p.m. Eric Apfelbach then conducted many of the Consortium members on a tour of the Virent Energy Systems facility which was located near the meeting site.